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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,447	05/02/2001	Roland M. Morley	INTL-0535-US (P10840)	7740

7590

01/02/2003

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EXAMINER
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LEURIG, SHARLENE L

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 01/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/847,447

Applicant(s)

MORLEY ET AL.

Examiner

Sharlene Leurig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 12-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 12-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method of making a large format display, there being no allowable generic or linking claim. Election was made **without** traverse over the phone on Wednesday, October 2, 2002, as indicated in Paper No. 2. However, as the applicant did not verify the election in Paper No. 3, the election is considered to be made without traverse and is made final.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthies et al. (6,370,019). Matthies discloses a large format display comprising a plurality of emissive display modules (Figure 1, elements 122 and 124). Regarding claim 1, each module has at least one alignment element in the form of a matching connector (column 6, line 49) that mates with an alignment device on the backframe (Figure 9, element 904). Matching connectors necessarily function as alignment devices since they require proper alignment to mate. Therefore the proper alignment of matching connectors would necessarily align the module with the backframe. Although

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Matthies does not specifically disclose more than one connector pair per tile, two connectors would have been an obvious choice to provide the structure for multiple voltages or redundant circuitry should one of the matching connector pairs fail.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Matthies' modules to have more than one matching connector pair per module in order to provide a more reliable unit or to provide a unit having diverse electrical permutations.

Regarding claim 2, the module has a backplate (Figure 2, element 130) on which the alignment elements are formed (column 6, line 50). Regarding claim 3, a driver chip is located on the back surface of the display tile (Figure 7, element 134) and numerous emissive elements are formed on the front surface of the display tile (Figure 7, element 708). Regarding claim 4, Matthies discloses fasteners extending from the backplate to attach it to the backframe (column 6, line 35). Regarding claim 5, these fasteners may comprise connectors which allow the backpanel to be "plugged into" the backframe, thereby engaging elements on the backframe to secure the backframe to the modules (column 6, line 37). Regarding claim 6, the option of plugging connectors into the backframe allows the backpanel to be removeably connected to the backframe to permit "the repair and replacement of the individual tiles" (column 6, line 39).

Regarding claim 7 Matthies discloses fasteners extending from the backplate to attach it to the backframe, as discussed above, but lacks the specific type of a threaded fastener. However, the applicant's disclosure fails to show the use of threaded fasteners to solve any of the stated problems or yield any unexpected results that are not within

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the scope of the teachings applied. Consequently, the use of threaded fasteners is considered to be an obvious matter of design choice.

Regarding claim 8, as can be seen in Figure 6B, each module has a transparent layer 322 (column 9, line 20) and a plurality of spaced apart light emissive cells, elements 324, formed on the transparent layer, and separated by defining regions. Regarding claim 9, Matthies discloses the deposition of a black, optically absorbing material "in all areas where metal electrodes will be later deposited" before placement of the row electrodes (column 10, line 63). Since the row electrodes (Figure 6B, element 328) extend between the emissive cells, the optically absorbent material overlays the region between the cells. Regarding claim 10, Figure 8, element 802 shows the bead seal along the periphery of each module between adjacent modules. The optically absorbing masking layer (Figure 8, element 804) covers the bead seals that lie on the peripheral gaps between adjacent modules so when the tiled display is viewed from the top, no seal is seen.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthies et al. (6,370,019) in view of Lechner (6,190,172). Matthies discloses a tiled display with all the limitations discussed above but lacks optically clear adhesive between adjacent modules. However, Matthies discloses modules connected by mullions (column 6, line 21) as well as the need for the tiles to be arranged so that there are no visible seams (column 6, line 15). Lechner teaches the use of optically clear adhesive to bond connecting tabs to display screens of a multi-screen display so as not to interfere with the display (column 11, line 21). Therefore it would have been obvious to one of

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ordinary skill in the art at the time of the invention to modify Matthies' tiled display with optically clear adhesive instead of mullions to connect adjacent tiles while avoiding pronounced seams between tiles.

### ***Conclusion***

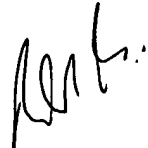
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharlene Leurig whose telephone number is (703)305-4745. The examiner can normally be reached on Monday through Friday, 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Sharlene Leurig  
December 20, 2002

SL

  
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